

West Marshall Street Bridge
Marshall Street, over Stony Creek
Norristown
Montgomery County
Pennsylvania

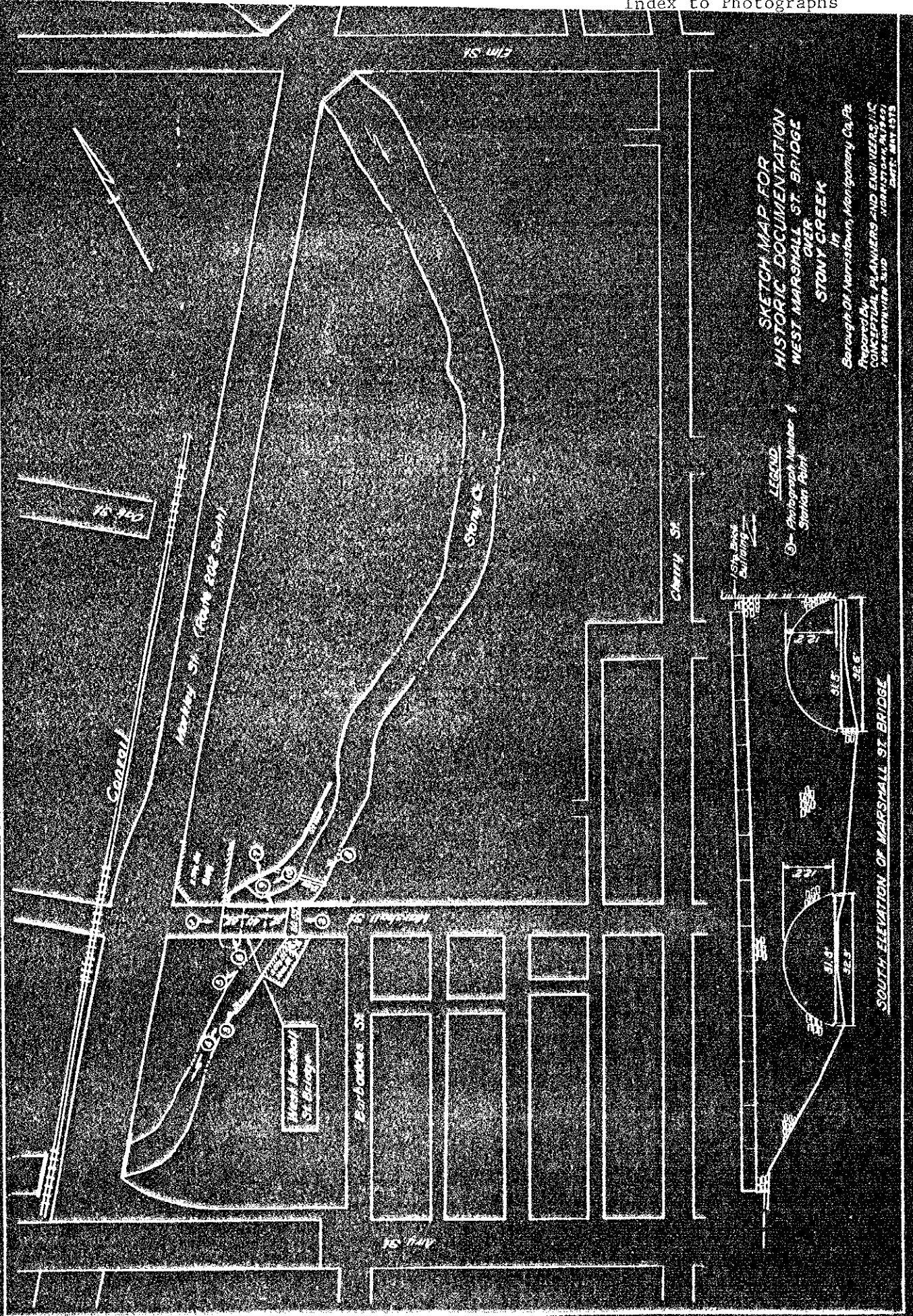
HAER No. PA-54

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D. C. 20240



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HISTORIC AMERICAN ENGINEERING RECORD

PA-54

West Marshall Street Bridge

Location: Over Stony Creek, carrying
Marshall Street westward from
Barbadoes Street, Norristown,
Montgomery County, Pennsylvania

UTM:
Quad:

Date of Construction: Original bridge on site
constructed 1854; present
structure constructed 1865

Present Owner: Norristown Borough

Present Use: Originally a vehicular and
pedestrian bridge, now closed
to all traffic.

Significance: Two span, stone arch bridge;
part of one of the most
important East-West highways
in Norristown.

Historian: Conceptual Planners & Engineers, Inc.
1606 Northview Boulevard
Norristown, Pennsylvania 19401

HISTORICAL SUMMARY
WEST MARSHALL STREET BRIDGE
OVER STONY CREEK

Owned and Maintained by Norristown Borough
in
Norristown Borough, Montgomery County, Pennsylvania

Stony Creek was originally spanned at this point by a single arch bridge carrying Marshall Street westward from Barbadoes Street in 1854.¹

This span carried traffic to the large tract of land annexed by the Borough in the 1850's² until a flood damaged the structure in 1865. The structure was rebuilt at that time to its present twin arch configuration.¹ The names of the bridge designer and builder are unfortunately not known.

The bridge, although badly damaged by floods in 1879 and 1931,¹ was rebuilt each time and maintained its twin arch character to the present.

1. Historical Society of Montgomery County, Norristown, Pa.
"Hocker's Notes, August 1955."
2. Historical Society of Montgomery County, Norristown, Pa.
"Norristown Times Herald, June 9, 1941."

The flood of July 14, 1931 occasioned repairs among which was the replacement of the old brick walkways by concrete sidewalks.³

In spite of additional significant floods in 1933, 1971, and 1972,⁴ and recently, the bridge continued to carry traffic until Borough Officials were forced to close it on December 14, 1977 because of evidence of impending failure which became apparent at that time.

Investigation subsequent to the bridge closing showed that preservation of the old twin arch bridge through extensive repairs was impractical, due to recent flood studies which called for increased waterway opening and improved alignment of the flow through the structure.

DESCRIPTION AND DIMENSIONS OF EXISTING BRIDGE

The existing twin arch bridge is a filled stone masonry arch structure, constructed of uncoursed limestone rubble masonry with cement mortar.

3. Historical Society of Montgomery County, Norristown, Pa.
"Norristown Times Herald, October 31, 1931."

4. June 1976 Corps of Engineers "Special Flood Hazard Report of Stony Creek" prepared for the Montgomery County Planning Commission.

Each arch has a span of 32 feet with a center pier of 40 foot width, giving an overall structure length of 104 feet measured along the roadway centerline.

The roadway carried by the structure is 26 feet between curbs and is concrete. There is a 12 foot concrete sidewalk on each side of the roadway.

The spandrel walls are 16 inches wide at the sidewalk level and are 145 feet long on the downstream side and 95 feet long on the upstream side. On the upstream side, the wall continues to the east as a 20 inch side wall, retaining the roadway fill. The width, face to face, of the structure is 50.4 feet measured at right angles to the roadway center line.

The arch openings have a 12.2 foot rise from springline to the top of the arch, and widths as indicated in the table below.

<u>FACE</u>	<u>ARCH</u>	<u>WIDTH AT SPRINGLINE</u>	<u>WIDTH BELOW SPRINGLINE</u>
Upstream	West	32.0 Ft.	29.1 Ft.
Upstream	East	31.6 Ft.	31.6 Ft.
Downstream	West	32.3 Ft.	31.3 Ft.
Downstream	East	32.6 Ft.	31.5 Ft.

The stream bed is not paved, and the dimension from the arch springline to the streambed varies greatly as scour and sedimentation occur. A normal depth here could be considered as 2 to 3 feet.

Presently, because of channel siltation, dry weather flow is carried entirely through the east arch.

The unfortunate need to close this important east-west artery has created traffic congestion and inconvenience to the area and its immediate replacement is supported by those concerned.

A copy of the May 22, 1978 Historical Society of Montgomery County Report and the April 24, 1979 Borough of Norristown Secretary's Report of Council Minutes mentioning Marshall Street in the 1800's are attached for reference.

May 22, 1978

The following information was collected from the Historical Society of Montgomery County, Norristown, Pennsylvania:

Hocker's Notes, August 3, 1955

Marshall Street is one of the most important east-west highways in Norristown.

First mention was in an ordinance of 1842 calling for the grading of the street from Swede to Green. Isaac Roberts began selling building lots along lower Marshall Street in 1845. Marshall Street from Swede Street to Green Street Road at Saw Mill Run was included in a report of the street commission in 1845. Most of this part of the street was in the territory developed by William Slingluff and Mordecai Moore in the 1840's and 1850's.

Marshall Street was opened from Barbadoes Street westward to Forest Avenue in 1854. The bridge carrying the street over Stony Creek was built that year. It consisted of one arch. When a flood damaged the bridge in 1865, it was rebuilt with two arches. It was badly damaged again by floods in 1879 and 1931.

(Map from the estate of Matthew Chain, August, 1827.)

Norristown Town Council, September 26, 1853

L.E. Corson and Gabriel Kohn offer to contribute half the cost of a stone bridge over Stony Creek at Marshall Street, provided the Borough proceeds forthwith. Council adopts resolution: thanks owing to lateness of season and want of sufficient funds to carry the work to completion in the present year council regrets it is compelled to decline the proposal.

Norristown Times Herald, June 9, 1941

Norristown in the 1850's had an era of expansion and improvement... The annexation of the large tract of land beyond Stony Creek necessitated the laying out of many streets. At the same time attention was given to highway improvements in the old part of town.

While the Main Street bridge was under construction, traffic was diverted to a temporary bridge at Lafayette Street. A cofferdam was built in the creek near its mouth and then the water was pumped out of the stream. Taking advantage of this condition, Council also had a bridge built over the creek at Marshall Street.

Stony Creek merchant and flour mill, Egypt Street corner of Markley. Lehman and Fizone proprietors. Built 1831, rebuilt 1853 by Jacob Freedley.

Borough Directory 1096 - 1961

In 1880 the Main Street Station was built and this mill was demolished to make way for the station. When the flour mill was demolished, the stones of the walls were sold to George C. Morgan together with the water rights on Stony Creek. Morgan used the stone to erect a three story flour mill on Marshall Street and Stony Creek and equipped the establishment with some of the machinery from the old Main Street mill. Morgan's mill was soon regarded by many as a historical landmark because of the old stones with which the walls were built.

Norristown Times Herald, October 31, 1931

Marshall Street span reopened to traffic - damage by flood after cloudburst on July 14, repaired under Borough supervision.

For the first time since July 14 when a cloudburst swelled the flow of the Stony Creek to flood proportions, the bridge spanning the stream at Marshall Street was opened to traffic today. The stone arch span was badly damaged by the strong force of high water. The brick walks were destroyed, the paved street was damaged beyond repair and the mason work did not withstand the strong currents. At first it seemed necessary to erect a new bridge but the Borough Council decided to repair the span on which work was completed only last week with the concrete pouring of the highway.

COUNCIL MINUTES RESEARCHED BY BORO SECY.

Council Journal No. 2:

10/5/53 - Proposed Bridge over Marshall Street & Stony Creek
rejected because of no funds.

Council Journal No. 3

5/29/54 - Contribution subscriptions for the erection of a bridge
over Stony Creek at Marshall Street.

6/26/54 - Council notified contributors that contributions were
accepted by them for a bridge at Marshall Street over
Stoney Creek.

Page 16. June 26, 1854 - Resolutions adopted (see Resolution
Book 252 and 253, concerning plan or draft of Bridge which
was approved and Council enacted Resolution to Advertise
for sealed proposals to be opened and work allotted on
July 5, 1854, 20% of cost to be retained by Council
until work is fully and fairly completed.

-April 24, 1979